

**RECEIVED  
CENTRAL FAX CENTER****APR 18 2006**

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) PHNL 000103 (M-11774 US)	
I hereby certify that this correspondence is being facsimile transmitted or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>April 18, 2006</u> Signature <u><i>R. Leiterman</i></u> Typed or printed name <u>Rachel V. Leiterman</u>		Application Number <b>09/803,999</b>	Filed <b>March 12, 2001</b>
		First Named Inventor <b>Matthijs H. Keuper</b>	
		Art Unit <b>2833</b>	Examiner <b>Alexander Gilman</b>
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
I am the		<u><i>R. Leiterman</i></u> Signature <b>Rachel V. Leiterman</b> Typed or printed name	
<input type="checkbox"/> applicant/inventor.		<b>(408) 382-0480</b> Telephone number	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		<b>April 18, 2006</b> Date	
<input checked="" type="checkbox"/> attorney or agent of record. Registration number <u><b>46,868</b></u>			
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____			
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.			
<input checked="" type="checkbox"/> Total of <u><b>1</b></u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

APR 18 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Matthijs H. Keuper  
Assignee: Lumileds Lighting U.S., LLC  
Title: Light-Emitting Diode, Lighting Device And Method Of Manufacturing Same  
Serial No.: 09/803,999 Filing Date: March 12, 2001  
Examiner: Alexander Gilman Group Art Unit: 2833  
Docket No.: PHNL 000103  
(M-11774 US)

San Jose, California  
April 18, 2005

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant respectfully requests review of the final rejection in the above-identified application.

I. 35 U.S.C. 112 Rejections

The following remarks are reproduced from page 6 of the Request for Reconsideration submitted November 1, 2005:

Claims 1 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

Regarding claim 1, the Examiner states "Claim 1, line 4 recites 'a light-emitting surface disposed'. It is unclear which element of the device is related to the light-emitting surface. The surface is not an element by itself." Applicant notes that the construction of claim 1 is consistent with other parts of the specification which refer to a lighting device including a chip and a light-emitting surface. See, for example, page 3, first paragraph, which

PATENT LAW  
GROUP LLP  
2635 N. FIRST ST.  
SUITE 225  
SAN JOSE, CA 95134  
(408) 292-0480  
FAX (408) 292-0481

states "The invention also relates to a lighting device comprising at least one light-emitting diode including a chip which is capable of emitting visible light of a first wavelength, a light-emitting surface and a phosphor layer which is provided on the light-emitting surface and which is capable of converting light of the first wavelength to visible light of a second wavelength, said light-emitting surface comprising a sub-surface without the phosphor layer."

Applicant respectfully submits that all claims meet the requirements of 35 U.S.C. 112.

## **II. 35 U.S.C. 102 Rejections**

The following remarks are reproduced from pages 6-8 of the Request for Reconsideration submitted November 1, 2005:

Claims 1, 3-6, 8, 9, 11-13, 20, and 23-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Vriens, U.S. 4,822,144. Applicant respectfully traverses the rejection. The Examiner states Vriens "disclose (Fig. 8) [ ] a light-emitting device comprising: a light emitting diode (col. 3, lines 51-52) emitting a light of a first wavelength; a light-emitting surface (the surface of 10), and a phosphor layer (r.n.8, for [example] -R) which is provided on a first portion of the light emitting surface wherein a second portion of the light-emitting surface (portion covered by G and B) without the phosphor (the portion without R) is surrounded by the first portion (alternatively, the second portion is a space between R and G)." As pointed out in the office action response faxed July 21, 2005, Applicant assumes the Examiner intends to refer to Fig. 1 since Vriens contains no Fig. 8.

### **A. Claim element: "semiconductor light emitting diode"**

In the office action response faxed July 21, 2005, Applicant noted that Vriens does not teach the claim element "semiconductor light emitting diode" in claims 1, 9, and 23:

PATENT LAW  
GROUP LLP  
2635 N. FIRST ST.  
SUITE 225  
SAN JOSE, CA 95134  
(408) 382-0481  
FAX (408) 382-0481

Applicant has found no teaching in Vriens of a "semiconductor light emitting diode" as recited in claim 1. Column 1, lines 26-27 of Vriens, cited by the Examiner as teaching this element of claim 1, actually says only: "... of data display in computer systems, and in, for example, display devices in dashboards etc." Vriens' light source is described only as a "radiation source 10." See, for example, col. 3, lines 51-52 and 63-64. Applicant has found no teaching that Vriens' radiation source 10 is a semiconductor light emitting device.

In response to these arguments, the Examiner has apparently changed the citation to the section of Vriens that purports to teach a light emitting diode from col. 1 lines 26-27 to col. 3 lines 51-52. The passage at Vriens' column 3 lines 51-52 does not teach "a semiconductor light emitting diode" as recited in claims 1, 9, and 23, it teaches only "a radiation source."

In the response to arguments section of the present office action, the Examiner states "Applicant's arguments filed 07/21/2005 regarding claims 1, 9, 23 have been fully considered but they are not persuasive. Applicants argue that the prior art Vriens describes 'radiation source 10' not a light-emitting device. However, the broad term 'radiation source' includes, incorporates a term 'light-emitting device', since --radiation-- means --energy radiated or transmitted in the form of rays, waves, or particles--(The Heritage Dictionary, 4<sup>th</sup> Ed)."

Applicant does not dispute that Vriens' "radiation source" may be a light emitting device. However, claim 1 recites "a semiconductor light emitting diode," a structure far more specific than a "radiation source" or "light emitting device." Applicant has found no teaching in Vriens that radiation source 10 may be a semiconductor device, or a diode. Applicant reminds the Examiner that MPEP section 2131 on anticipation requires that "The identical invention must be shown in as complete detail as is contained in the ... claim." (Emphasis added.) Since Vriens discloses only the broad "radiation source," not the specific "semiconductor light emitting diode" of claims 1, 9, and 23, Vriens does not show these

PATENT LAW  
GROUP LLP  
2635 N. FIRST ST.  
SUITE 223  
SAN JOSE, CA 95134  
(408) 342-0420  
FAX (408) 332-0431

claims' inventions in as complete detail as set forth in the claims, thus Vriens does not anticipate claims 1, 9, and 23.

**B. Claim element: "second portion is . . . surrounded by the first portion"**

Claims 1 and 23 recite "the second portion [without phosphor] is substantially surrounded by the first portion [with phosphor]." Claim 9 recites "the phosphor layer is removed from, or not provided on, a portion of the light-emitting surface substantially surrounded by the phosphor layer." Applicant has found no such teaching in Vriens. Besides Figs. 1 and 2, which provide only a cross sectional view and therefore cannot show a "second portion . . . substantially surrounded by the first portion," the only description Applicant has found in Vriens of the arrangement of phosphors is at col. 3, lines 46-55, which state:

Furthermore the device comprises a pattern 8 of luminescent materials which are provided in accordance with a given arrangement and which radiate in this embodiment red, green and blue light if they are irradiated by, for example UV light 9 from a radiation source 10. The red, green and blue phosphor dots coincide with the switching points defined by the electrodes 5 and 6, while the liquid crystal 2 serves as a light switch for the light generated in the phosphors.

The above passage refers only to phosphor dots coinciding with switching points defined by the electrodes 5 and 6, the above passage does not teach that "the second portion [without phosphor] is substantially surrounded by the first portion [with phosphor]" (emphasis added) on a light emitting surface corresponding to an area of a light emitting diode, as recited in claims 1 and 23, or that "the phosphor layer is removed from, or not provided on, a portion of the light-emitting surface substantially surrounded by the phosphor layer" as recited in claim 9. For this additional reason, Vriens does not anticipate claims 1, 9, and 23.

**C. Dependent claims**

PATENT LAW  
GROUP LLP  
2633 N. FIRST ST.  
SUITE 220  
SAN JOSE, CA 95134  
(408) 382-0400  
FAX (408) 382-0401

The dependent claims rejected under 35 U.S.C. 102 are allowable over Vriens by virtue of their dependence on claims 1, 9, and 23, and for the additional reasons set forth on pages 9 and 10 of the Request for Reconsideration submitted November 1, 2005.

### III. 35 U.S.C. 103 Rejections

The dependent claims rejected under 35 U.S.C. 103 are allowable over the art cited by virtue of their dependence on claims 1, 9, and 23, and for the additional reasons set forth on pages 10 and 11 of the Request for Reconsideration submitted November 1, 2005.

For the above reasons, Applicant respectfully requests that the final rejection be withdrawn. Any questions on the above may be directed to the undersigned at 408-382-0480 ext. 204.

#### Certification of Facsimile Transmission

I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

R. Leiterman  
Signature

4/18/06  
Date

Respectfully submitted,

R. Leiterman

Rachel V. Leiterman  
Attorney for Applicants  
Reg. No. 46,868

PATENT LAW  
GROUP LLP  
2035 N. FIRST ST.  
SUITE 223  
SAN JOSE, CA 95134  
(408) 382-0480  
FAX (408) 382-0481